

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PHFR030125WO	FOR FURTHER ACTION		See item 4 below
International application No. PCT/IB2004/003356	International filing date (<i>day/month/year</i>) 11 October 2004 (11.10.2004)	Priority date (<i>day/month/year</i>) 20 October 2003 (20.10.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant KONINKLIJKE PHILIPS ELECTRONICS N.V.			

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 7 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 740 14 35</p>	<p>Date of issuance of this report 24 April 2006 (24.04.2006)</p> <p>Authorized officer <div style="text-align: center; font-weight: bold;">Cecile Chatel</div></p> <p>Telephone No. +41 22 338 70 60</p>
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PATENT COOPERATION TREATY

REC'D 27 APR 2005

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From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2004/003356 ✓

International filing date (day/month/year)
11.10.2004 ✓

Priority date (day/month/year)
20.10.2003

International Patent Classification (IPC) or both national classification and IPC
G11B7/005, G11B7/013, G11B7/09

Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V. ✓

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/003356

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/003356

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	5
	No: Claims	1-4,6-10
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

1 Reference is made to the following document/s/:

D1: DE 39 31 500 A1
D2: EP-A-0 135 750
D3: EP-A-1 111 599
D4: EP-A-0 360 466
D5: EP-A-0 737 967

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1 - 4 and 6 - 10 is not new in the sense of Article 33(2) PCT.

2.1 The document D1 discloses (the references in parentheses applying to this document):

An apparatus for recording and/or reading optical data carriers (col. 7 line 44 - col. 11 line 34; fig. 1) comprising:

an optical source (fig. 1 101);

an objective lens assembly (fig. 1 108);

a convex detection lens (fig. 1 111);

a tracking optical detection assembly (fig. 1 115; figs. 6A, 6B); and

a beam splitter (fig. 1 109) separating a first and a second detection branch with a focus detection assembly (fig. 1 112 - 114).

As the apparatus described in D1 does refer to corrected beam shaping (col. 7 line 44 - col. 9 line 3), as it does not use any astigmatism in focus detection and as the beam spots shown in figs. 5A - 6B are astigmatism free it is implicit to the person skilled in the art that the detection lens 111 is thin and astigmatism free. Astigmatism is an aberration that will generally avoided in optical systems if it is not used for a particular purpose.

2.2 Furthermore, comparison of the subject-matter of present claims 1 - 4 with the

disclosure of D2 (see passages cited in the search report) reveals that an apparatus comprising all the features defined in said claims is already known, so that present claims 1 - 4 are not considered to be meet the novelty requirement. In particular D2 shows that in order to apply the astigmatic focus error generation a cylindrical lens 15 has to be used (cf. D2 fig. 1 15).

2.3 Comparison of the subject-matter of present claims 6 - 10 with the disclosure of D4 (see passages cited in the search report) or with the disclosure of D5 (see passages cited in the search report) reveals that an optical recording method and the corresponding optical data carrier comprising all the features and steps defined in said claims are already known, so that present claims 6 - 10 are not considered to meet the novelty requirement. In particular D4 describes not only phase change recording layers but also ablation recording layers (cf. D4 description of the background art).

3 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 5 does not involve an inventive step in the sense of Article 33(3) PCT.

3.1 Based on D1 or D2 as prior art it is obvious that a diagonal-push-pull or differential phase detection tracking error generation as proposed in D3 (cf. D3 paragraphs [0015] and [0016]) would be applied as an alternative to the push-pull tracking error generation described in D1 or D2.

Re Item VII

4 Certain defects in the international application:

4.1 Independent claims 1, 6, and 10 are not drafted in the two part form specified in Rule 6.3b) of the PCT.

4.2 The description does not cite the documents D1 - D5 reflecting the relevant

background art (see Rule 5.1a) ii) PCT).

Re Item VIII

- 5 Certain observations on the international application
- 5.1 Independent claim 1 of the present Application does not comply with the requirements of Article 6 PCT in that it is not clear, since it defines the detection lens with a negative feature (cf. claim 1 'without substantial astigmatism') while a positive and clear definition of this feature would have been possible (cf. description page 8 lines 3 - 8).